

STATEMENT OF BASIS (AI No. 149089)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0123021 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Western International Gas & Cylinder Inc
Geismar Facility
P.O. Box 668
Bellville, TX 77418

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Molly McKean

DATE PREPARED: July 6, 2007

1. PERMIT STATUS

A. Reason For Permit Action:

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permits - LAR05N817
LPDES permit effective date: March 29, 2007
LPDES permit expiration date: April 30, 2011

By the authority of edict LA R.S. 30:2001, *et seq.*, and the Environmental Regulatory Code, Part IX, Water Quality Regulations, LPDES permit LAR05N817 will be canceled upon issuance of the final permit.

D. Date Application Received: June 26, 2007

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - bulk acetylene gas distribution facility

This facility receives wet acetylene gas via pipeline from an off-site supplier. Wet acetylene enters a knockout pot to remove water droplets, then travels through a sulfuric acid scrubber to remove any remaining water. The gas is then cooled, compressed, and loaded in to cylinder trucks for transport. The facility handles approx. 24,000 lbs/day and no acetylene gas is stored on-site.

The facility proposes to discharge the gas knockout water, compressor cooling water, cooling tower blowdown, loading rack cooling water, stormwater from the acid tank containment sump, and industrial stormwater through Outfall 001. Knockout water is defined as the wastewater collected in the knockout pot and is estimated as 550 gallons/month. Loading rack cooling water is defined as untreated well water sprayed over the bulk cylinder trailers to cool the cylinders and improve filling. The acid tank containment sump contains three sulfuric acid storage tanks. Stormwater from the

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containment sump that either has a low pH or that fails visual inspection is pumped to the recovered acid tank for offsite recycling. All wastewater is routed to the stormwater retention pond prior to discharge through Outfall 001.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II; as per LAC33:IX.1319 Table I and SIC 5161. In Appendix A - Section IV (Relation of 1987 to 1977 Industries) of the *Standard Industrial Classification Manual*, the SIC code 5169 is equivalent to a previous SIC code of 5161.
3. Wastewater Type: II
4. SIC code: 5169

C. LOCATION - 37091 Highway 30, Geismar, Ascension Parish
 Latitude 30° 12' 26", Longitude 90° 59' 27"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: acetylene gas knockout water, compressor cooling water, cooling tower blowdown, loading rack cooling water, stormwater from the acid tank containment sump, and industrial stormwater

Treatment: retention pond

Location: at the point of discharge from the retention pond, prior to mixing with any other waters

Flow: variable (stormwater dependent) minimum 1000 GPD from Cooling Waters

Discharge Route: Smith Bayou via local drainage

1. RECEIVING WATERS

STREAM - Smith Bayou via local drainage

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040404

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife

5. TMDL STATUS

Subsegment 040404, New River - From headwaters to New River Canal, is listed on LDEQ's Final 2004 303(d) List as impaired for organic enrichment/low DO and pathogen indicators. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the bulk acetylene gas distributor point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. This facility is not expected to discharge pollutants associated with the pathogen

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indicators impairment. Oxygen –demanding parameters shall be monitored and controlled by the TOC limitation.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

A. WQMD – There are no inspections or compliance actions on file as of July 12, 2007.

B. DMR Review/Excursions – There are no DMRs on file as of July 12, 2007. This is a new facility.

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040404 of the Lake Pontchartrain Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

9. HISTORIC SITES

The discharge will be from a proposed facility (expansion). LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated June 27, 2007 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response letter, received August 1, 2007, stated that the facility as proposed will have no potential effects.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

11. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

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Rationale for Western International Gas & Cylinder Inc

1. **Outfall 001** - acetylene gas knockout water, compressor cooling water, cooling tower blowdown, loading rack cooling water, and stormwater (estimated flow is 1000 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow	--- : Report	see Limits Justification below
TOC	--- : 50	see Limits Justification below
Oil & Grease	--- : 15	see Limits Justification below
Temperature	--- : Report	see Limits Justification below
Benzene	--- : 100 μ g/l	see Limits Justification below
Total Phenols	--- : 500 μ g/l	see Limits Justification below
PAHs	--- : 10 μ g/l	see Limits Justification below
pH	6.0 su – 9.0 su (min) (max)	see Limits Justification below

Treatment: retention pond

Monitoring Frequency: monthly

Limits Justification:

Flow: Flow reporting is required by LAC 33: IX.2707.I.1.b

TOC, Oil & Grease, pH: These limits are based on BPJ and LDEQ Guidance on Stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

Temperature: Temperature reporting requirements are based on Schedule E of LAG480000 and BPJ for non-contact cooling waters

Benzene, Total Phenols: Lab data on the acetylene gas knockout water, submitted with the application, indicated the presence of phenols and benzene above the recognized MQLs. LDEQ recognizes that the knockout water is a small percentage of the overall discharge, however benzene and phenol are classified as toxic pollutants under section 307(a) of the Clean Water Act and 40 CFR 401.15. Water quality based limits are not required at this time. Benzene and total phenol limits are included based on similar permitted facilities and BPJ.

Polynuclear Aromatic Hydrocarbons (PAHs): PAH's are highly carcinogenic at relatively low levels and therefore are of potential concern. Lab data on the acetylene gas knockout water, submitted with the application, indicated the presence of naphthalene in concentrations significantly above the MQL and trace amounts of acenaphthene and acenaphthylene. Naphthalene and acenaphthene are also classified as toxic pollutants under section 307(a) of the Clean Water Act and 40 CFR 401.15. Water quality based limits are not required at this time. A PAH limitation has been included based on BPJ and similar wastewaters (LAG830000 and LAG940000).

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The Daily Maximum value of any of the following PAHs shall not exceed 10 ug/L: acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(ghi)perylene, benzy(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorine, indeno(1,2,3,cd)pyrene, naphthalene, phenanthrene, pyrene.

BPJ Best Professional Judgement
su Standard Units

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 5169 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).